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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/658,550	09/08/2000	Brian Sagar	11619 B	3903
7590 11/18/2004			EXAMINER	
CHARLES E. BAXLEY HART, BAXLEY, DANIELS & HOLTON 90 JOHN STREET, THIRD FLOOR NEW YORK, NY 10038			HANNETT, JAMES M	
			ART UNIT	PAPER NUMBER
			2612	

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/658,550

Applicant(s)

SAGAR ET AL

Examiner

James M Hannett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-71 is/are pending in the application.
- 4a) Of the above claim(s) 10-71 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/20/01, 12/29/00.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

Claims 10-71 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on 7/01/2004.

Applicant's election without traverse of Claims 1-9 in the reply filed on 7/01/2004 is acknowledged.

### *Drawings*

The drawings are objected to because several of the figures are hand drawn furthermore, Figure 2 does not contain any labels. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Method for chroma-keying in which a colored backdrop is deployed with retro-reflective elements.

***Claim Objections***

Claims 1-4 and 5 are objected to because of the following informalities: the word coloured should be replaced with colored. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**1:** Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by GB 231814 A Graham.

**2:** As for Claim 1, Graham teaches on Page 3, Lines 7-11 and Page 4, Lines 14-26 and depicts in figure 1 a method for chroma-keying comprising deploying a colored backdrop with retro-reflective elements and imaging with a camera a scene against the backdrop with the backdrop principally illuminated with light from a source or sources away from the camera axis. Graham teaches on Page 5, Lines 26-28 and Page 6, Lines 1-3 that the light source and the camera axis subtend an angle of less than about 5 degrees and more preferably of the order of

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about 1 degree. Therefore, the backdrop is illuminated with light from a source or sources away from the camera axis.

3: In regards to Claim 2, Graham teaches on Page 4, Lines 19-26 and Page 5, Lines 4-10 the backdrop and the scene are illuminated with light of the same color as the backdrop from a source close to the camera axis.

4: As for Claim 3, Graham teaches on Page 3, Lines 7-11 and Page 4, Lines 14-26 and depicts in figure 1a method for chroma-keying comprising deploying a backdrop with retro-reflective elements and imaging with a camera a scene against the backdrop with the backdrop illuminated with a chroma-keying light source disposed off the camera axis to an extent which does not impede auto-cueing.

5: In regards to Claim 4, Graham teaches on Page 5, Lines 16-25 the background and the scene being illuminated solely by a source or sources separate from the camera.

6: As for Claim 5, Graham teaches on Page 4, Lines 19-20 the backdrop is colored.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7: Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 231814 A Graham in view of USPN 6,101,289 Keller.

8: In regards to Claim 6, Graham teaches on Page 3, Lines 7-11 and Page 4, Lines 14-26 and depicts in Figure 1 a method of imaging a subject against a backdrop, the method comprising

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deploying a backdrop with retro-reflective elements, illuminating the backdrop and the subject, imaging with camera means the subject against the backdrop so that light is reflected and/or scattered from the backdrop and the subject to the camera means, and processing the image obtained to produce a viewable image in which the covered parts are substantially indistinguishable from the backdrop. Graham teaches the use of a chroma-keying method using a retro-reflective backdrop to mask the background in an image and replacing the color of the background with another background image. However, Graham does not teach the method of masking the subject in the scene with the retro-reflective material to allow the processing to remove the subject along with the background.

Keller teaches on Column 2, lines 64-67 and Column 3, Lines 1-36 a method of chroma-keying in which an actor is enveloped in a suit that renders the actor invisible to the camera during a chroma-keying operation. This method is advantageous because it allows a studio to produce special effects and replace the subject as well as the background with another image.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to envelop an actor in the retro-reflective material of Graham in order to allow for special effects in which both the background and subject can be replaced as taught by Keller in order to produce a wide variety of special effects.

9: As for Claim 7, Graham in view of Keller teaches a chroma-key method that uses a retro-reflective material to cover a background and an actor and to replace the color of the reflected retro-reflective material in image processing with data from another scene. However, Graham in view of Keller does not teach that the subject is imaged while operating or moving an object or objects which are prominently visible in the viewable image.

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Official Notice is taken that it was well known in the art at the time the invention was made to perform special effects using chroma-keying in which an actor in a chroma-keyed suit moves an object that is not masked with the chroma-key color to make the object appear to float or move by itself.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the actor in the body suit of Graham in view of Keller to move objects to make the object appear to float or move by itself.

10: In regards to Claim 8, Graham teaches on Page 3, Lines 7-11 and Page 4, Lines 14-26 and depicts in Figure 1 deploying a backdrop with retro-reflective elements, illuminating the backdrop, the objects and the subjects and/or devices, imaging the same, while illuminated, with camera means against the backdrop so that light is reflected and/or scattered from the backdrop, objects, subjects and/or devices to the camera means, and processing the image obtained to produce a viewable image in which the masked part or parts of the manipulating subjects and/or devices are substantially indistinguishable from the backdrop. Graham teaches the use of a chroma-keying method using a retro-reflective backdrop to mask the background in an image and replacing the color of the background with another background image. However, Graham does not teach the method of masking the subject in the scene with the retro-reflective material to allow the processing to remove the subject along with the background.

Keller teaches on Column 2, lines 64-67 and Column 3, Lines 1-36 a method of chroma-keying in which an actor is enveloped in a suit that renders the actor invisible to the camera during a chroma-keying operation. This method is advantageous because it allows a studio to produce special effects and replace the subject as well as the background with another image.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to envelop an actor in the retro-reflective material of Graham in order to allow for special effects in which both the background and subject can be replaced as taught by Keller in order to produce a wide variety of special effects.

Graham in view of Keller teaches a chroma-key method that uses a retro-reflective material to cover a background and an actor and to replace the color of the reflected retro-reflective material in image processing with data from another scene. However, Graham in view of Keller does not teach that the subject is imaged while operating or moving an object or objects which are prominently visible in the viewable image.

Official Notice is taken that it was well known in the art at the time the invention was made to perform special effects using chroma-keying in which an actor in a chroma-keyed suit moves an object that is not masked with the chroma-key color to make the object appear to float or move by itself.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the actor in the body suit of Graham in view of Keller to move objects to make the object appear to float or move by itself.

11: As for Claim 9, Graham further teaches on Page 1, Liens 1-14 the viewable image is so produced in such that an image representing a background scene is superimposed on the backdrop and the covered part or parts of the subject.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 5,946,500 Oles teaches a system for chroma replacements using a retro-



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reflective backdrop; USPN 6,101,289 Keller teaches a method of background replacement using a retro-reflective backdrop.

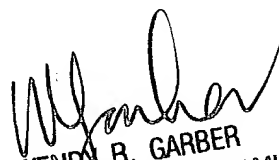
Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M Hannett whose telephone number is 703-305-7880. The examiner can normally be reached on 8:00 am to 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 703-305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James M. Hannett  
Examiner  
Art Unit 2612

JMH  
November 3, 2004

  
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